Via e mail
7/22/05
Re my comments on Bulletin 160-05

Dear Mr. Dabbs,

Thanks for coordinated us on Table Two 6/28/05 in Bakersfield.

Unless someone submits a letter on behalf of the Sierra Club, this letter will represent the Club's views. There are many ways that water impacts the Club's concerns that are not mentioned in this letter.

HIGH LIGHTS DOCUMENT

Every place and every activity are "hitched together" as John Muir pointed out. Unfortunately, we must deal with California, a political entity. If there must be political entities, it is too bad their borders are often rivers rather than ridge tops, as Dennis Fox said 6/28. We need to think in terms of river basins; I hope the regions mentioned on page 14 are river basins, not political jurisdictions. I do not know why each region can make its own choices. The plan makes it clear that if lawns in Beverly Hills use less water, there will be more water for salmon and food growing.

I am glad Bulletin 160-05 includes a strategic plan. Some of my comments request information needed to plan future water use.

Page six stresses the importance of protecting water quality. The threat to groundwater by sludge spreading and Concentrated Animal Feeding Operations (CAFOs) should be detailed. Since connections between groundwater basins may be greater than investigations have shown, this is especially important.

I applaud page 18. It says to me that those who build in flood plains must bear the consequence of their folly including:
The cost to state tax payers of levees and other flood protection
The cost to tax payers and insurance companies for flood damage
I would add:
Depriving streams of contact with their flood plain so that floods once again nourish the flood plain
Depriving wildlife of habitat, including the endangered South West Willow Flycatcher and Yellow billed cuckoo
Paving areas that can recharge groundwater

Here are previous comments on connecting a stream to its flood plain:
Connecting a stream to its flood plain diminishes flooding and diverts flood waters to the ground water. By "connecting a stream to it's flood plain" I mean having vegetation and wetland along the banks, leaving land near the River that

can be allowed to flood without major economic loss and trying to allow the river to use the course it had before there were any efforts to straighten or divert it; doing these things avoids any need for levees. This approach has been suggested to alleviate flooding by the Caliente Stream Group and is widely applicable.

Page 19 properly mentions the impact global warming will have on our water supply. The effect of rising sea levels on salt intrusion on coastal areas that have lowered their groundwater level should also be discussed; volume 1, page 3-8 mentions this.

VOLUME 1

David Sumi sent me this on November 14, 2003:
You can find your e-mailed comment on our Public Comment website at the following URL:
http://www.waterplan.water.ca.gov/b160/public_comments/publiccomments_index.html
It is dated 10/17/03. Click on the link called: “Comments on Stakeholder Briefing Drafts.”
David

VOLUME 2

Chapter 2
I agree about the stewardship farmers and ranchers *can* provide.

Page 2 If the stream is the only way to get water to the cattle, would diverting water several yards to a trough work? If the water had to be pumped, let us hope a wind machine or active solar system could do so. I wonder if solar cells that shade a water course, such as an irrigation ditch, decrease evaporation.

Page 5. Preservation of endangered species is everyone’s job. If urban developers paid adequate fees to Habitat Conservation Plans, species could be recovered so that farmers would not have to worry. In the meantime, those not in the “shoot, shovel and shut up” mode can find ways to farm and protect endangered species. Federal farm bill programs like EQIP and WRP also help. Does giving California farmers only 3 percent of federal farm conservation funding mean that they get less money per acre than others? It should be noted that California has more endangered species than any state except Hawaii.

Chapter 3

Page 3. Since lining canals sometimes deprives desired canal side vegetation of water, it is not always appropriate. This threatened to occur a few years ago in Tulare County and eventually was not done; details upon request.

Page4. Does conservation tillage reducing evapotranspiration? Recommendation 7 mentions “mulch”.

Please elaborate on recommendation 8. “Encourage billing by volume of water-delivered rate structures that improve water use efficiency.”

Chapter 6

Page 5. A seawater desal plant that makes 50,000 acre-feet per year, assuming operating 90% of the time, would require about 33
MW of power. Farms also use electricity to pump irrigation water. Let us hope solar and wind electricity becomes available. Distributed solar looks good in fields far from power plants.

VOLUME 3 CHAPTER 7

Chapter 8 has page numbers, chapter 7 does not.
Population: p.2 The eight southern counties have 3.5 million people, not many of them in the hills.

VOLUME 3 CHAPTER 8

Page2 Careful count of conversion of farmland to urban uses is needed, as you are doing. We should not retire farm land that produces the most food, fiber and jobs per unit water. Suburban sprawl often retires such land. Some agreements reached between Bakersfield developers and Gordon Nipp of the Sierra Club provide for agricultural easements. The plan should say if such agreements will conserve water in future decades by keeping land that produces the most food, fiber and jobs per unit water in production.

Page 9. The amount of water to produce the same amount of crop in the same locale by use of sprinkler, micro surface drip and micro sub-surface drip should be stated. Other advantages of the various methods should be determined. Does micro sub-surface drip decrease leaching requirement?

Page 12. An idea similar to the idea of using recreational areas to contain flood water achieves reality in the Kern River Parkway. Let there be more such places.

Page 15. White Wolf Basin. Does banking water after it is in the California Aqueduct conserve water as efficiently as banking it in the areas the water originated in? How much Aqueduct water evaporates? Is the Wheeler Ridge-

Maricopa WSD planning to sell the water to developers in Rosamond or on Tejon Ranch?

Page 16. Is the dairy industry, including its need to grow alfalfa and other crops, an efficient way to use water.

Final comments:

I oppose increasing Surface Storage

I think California needs to do all it can to avoid having to increase surface storage. Our increasing population deserves free flowing streams for viewing, swimming where safe and fishing.

We have built over 4,000 dams without providing ourselves with adequate water; I have no evidence that building more dams are part of the long term solution.

Most of our dams are in warm places, like the foothills of the Sierra Nevada; several acre feet per acre of water evaporate behind such dams in an average year. For example, the COE has figures for Lake Isabella, formed by damming the Kern River; I think evaporation exceeds rainfall on that reservoir's surface by over five feet. The water that evaporates could instead be stored in water banks; perhaps solar energy could raise the water from the bank.

Dams that generate electricity often cause fluctuating water levels that sustain fish populations less well than free flowing streams.

Dam building costs tax money and uses energy to make the cement contained in the dam and truck workers, material and machines to the dam site.

The same costs are expended to remove eroded soil that piles up behind a dam. If the water shed of the dam has been excessively logged or burned, the amount of soil eroded into the reservoir increases. Dams are diminishing California beaches because the soil that piles up behind the dams of a river that otherwise would go down to the ocean is needed to maintain ocean beaches.

To limit damage from flooding, do not allow structures in flood plains. Compensate flooded crops with tax money. This increases riparian habitat without costly levees. Trees along streams and canals reduce evaporation and provide nest sites for birds. I hope the birds eat the insects that breed in the water before the insects reach structures or damage crops.

we retire the least efficient farmland in order

>to save water for the land that creates more jobs per unit water than
>the land proposed for retirement.
We should not retire farm land that produces the most food, fiber and jobs per unit water. Suburban sprawl often retires such land.

We should not allow man-made water bodies. Many San Joaquin Valley floor residential developments are built around lakes and “rivers”. Standing water on the Valley floor evaporates 78 inches in an average year; the valley floor gets six inches in an average year. Even if the man-made water body is filled only with tertiary treated water, that makes six acre feet per acre of lake that is evaporated instead of being used by crops or fisheries. Some residential developments claim that they are recharge areas; if so, decisions about how much water can be placed in the artificial lake should be determined by a water bank so that the lake is dry when better areas for recharge are available to recharge the water that would have gone into the lake. The water bank, or other government agency should ascertain that the energy to get water from under the lake to cropland is not significantly greater than if the water were recharged elsewhere.

Near the end

KCWA wants water to legally leave the basin it was found in without going before the SWRCB “which may open up your permit”.

Whenever we address any of the world’s problems, we should remember John Muir’s admonition that “everything in the universe is tied to everything else”. Thus for printing and work-shopping Bulletin 160-05 we need to avoid duplicate pages, like the list of Public Advisory Members and we need to write on both sides of the page

Kamyar Guivetchi said the Resource Scenarios show scenarios under which there “would not be enough water to go around “; but, does not say population increase and sprawl cause this.
He said term limits decreases institutional memory.
Ca Water Plan has no mandates, no allocation of funds, no project specific recommendations, thus no need for CEQA

Water numbers and facts
Kamyar Guivetchi is chief of staff Bulletin 160-05

In average year CA gets, in MAFs
ppd 200
runoff 073
used 31
ratio of ppd in dry v. wet years 10:1

Paving porous to water is available.

Sand can not be compressed
Once clay is compressed, it can never again hold water
I thought once porous soil is paved, it can never again hold water

Ag numbers
Me
5/03 CA paves 50,000 of 50 million acres of irrigated farmland yearly. See CAlandUse01

6/28/05
CA has 24 million acres of farmland including 9.5 million acres of irrigated land.
0.5 million acres of the 9.5 give 2 or 3 crops a year.
Acres in ag have been decreasing for the last 15-20 yrs.
On average in 2000 each farmed acre got 3.4 feet of water
Crop per acre is up

.